

March 20, 2003

Mr. Joe Kamil
Kimball Industrial Complex
flexcel - Jasper 15th Street
1037 East 15th Street
Jasper, IN 47549

Re: Exempt Construction and Operation Status and
Name Change from Artec Manufacturing to
flexcel - Jasper 15th Street
037-17103-00100

Dear Mr. Kamil:

On January 9, 2003, the Office of Air Quality (OAQ) received notification from flexcel, a division of Kimball International to change the operating name of Artec Manufacturing located in the Kimball International 15th Street Industrial Complex, Jasper, Indiana to flexcel - Jasper 15th Street. This change does not affect the ownership.

The application from flexcel - Jasper 15th Street, formerly known as Artec Manufacturing located in the Kimball International 15th Street Source, received on January 9, 2003 has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following powder coating operation, to be located at flexcel - Jasper 15th Street, 1037 East 15th Street, Jasper, Indiana, is classified as exempt from air pollution permit requirements:

- (a) One (1) water based metal wash booth, identified as WB #1, with a capacity of 1000 miscellaneous metal parts per hour, having no VOC or HAP emissions, exhausting to an exhaust fan which exhausts to stack ID PCO #3 and stack ID PCO #4.
- (b) One (1) enclosed powder coating booth, identified as PB #1, having no VOC or HAP emissions, using dry filters for particulate overspray control, capacity: 40 pounds of powder per hour.
- (c) One (1) natural gas-fired curing oven, identified as PCO #1, rated at 1.0 MMBtu/hr, exhausting through one (1) stack identified as DO #1.
- (d) One (1) natural gas curing oven, identified as PCO #2, rated at 1.0 MMBtu/hr, exhausting through one (1) stack identified as DO #2.

The following conditions shall be applicable:

- 1. Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Alternate Opacity Limitations), opacity shall meet the following:
 - (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

2. Pursuant to 326 IAC 6-3-2 (Process Operations) the particulate from the PB #1 shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The dry filters shall be in operation at all times the PB #1 is in operation, in order to comply with this limit.

This existing source has submitted their Part 70 application T 037-7356-00100 on December 4, 1996. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Signed by
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

JF

cc: File - Dubois County
Dubois County Health Department
Air Compliance - Gene Kelso
Southwest Regional Office
Permit Tracking - Delisa Lee
Technical Support and Modeling - Michele Boner
Compliance Data Section - Karen Ampil
Part 70 Reviewer - Melissa Groch
Part 70 Application File - T-037-7356-00100

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name: Kimball Industrial Complex
flexcel - Jasper 15th Street
Source Location: 1037 East 15th Street, Jasper, IN 47549
County: Dubois
SIC Code: 2541
Operation Permit No.: T037-17103-00100
Permit Reviewer: James Farrell

On January 9, 2003, the Office of Air Quality (OAQ) received notification from flexcel, a division of Kimball International to change the operating name of Artec Manufacturing located in the Kimball International 15th Street Industrial Complex, Jasper, Indiana to flexcel - Jasper 15th Street. This change does not affect the ownership.

The Office of Air Quality (OAQ) has reviewed the exemption application from flexcel - Jasper 15th Street relating to the operation of a powder coating operation.

This new equipment will be incorporated into the pending Title V operating permit for this source.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) water based metal wash booth, identified as WB #1, with a capacity of 1000 miscellaneous metal parts per hour, having no VOC or HAP emissions, exhausting to an exhaust fan which exhausts to stack ID PCO #3 and stack ID PCO #4.
- (b) One (1) enclosed powder coating booth, identified as PB #1, having no VOC or HAP emissions, using dry filters for particulate overspray control, capacity: 40 pounds of powder per hour.
- (c) One (1) natural gas-fired curing oven, identified as PCO #1, rated at 1.0 MMBtu/hr, exhausting through one (1) stack identified as DO #1.
- (d) One (1) natural gas curing oven, identified as PCO #2, rated at 1.0 MMBtu/hr, exhausting through one (1) stack identified as DO #2.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Insignificant Activities

This source does not currently have any insignificant activities, as defined in 326 IAC 2-7-1(21).

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (inches)	Temperature (°F)
DO #1	Natural Gas Dry-Off Oven	10'	8"	not available
DO #2	Natural Gas Curing Oven	10'	16"	not available
DO #3	Metal Wash Booth	10'	10"	ambient
DO #4	Metal Wash Booth	10'	10"	ambient

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on January 9, 2003, with additional information received on February 7, 2003.

Emission Calculations

See pages 1-3 of 3 of Appendix A of this document for detailed emissions calculations

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	0.017
PM-10	0.067
SO ₂	0.005
VOC	0.048
CO	0.736
NO _x	0.876

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

County Attainment Status

The source is located in Dubois County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Dubois County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Dubois County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source has submitted a Preventive Maintenance Plan (PMP) on December 4, 1996. This PMP has been verified to fulfill the requirements of 326 IAC 1-6-3 (Preventive Maintenance Plan).

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM and VOCs. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Alternate Opacity Limitations), opacity shall meet the following:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (sixty (60) readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in

a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Alternate Opacity Limitations), opacity shall meet the following:

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- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (sixty (60) readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

326 IAC 6-3-2 (Process Operations)

The particulate from the PB #1 shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The dry filters shall be in operation at all times the PB #1 is in operation, in order to comply with this limit.

326 IAC 8

There are no Article 8 rules that apply to any emission units located at the source.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Conclusion

The operation of this proposed modification shall be subject to the conditions of the attached proposed Exemption No. 037-17103-00100.

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations**

**Company Name: flexcel - Jasper 15th Street
Address City IN Zip: 1037 East 15th Street, Jasper, IN 47549
CP: 037-17103
Pit ID: 037-00100
Reviewer: James Farrell
Date: 02/12/03**

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Powder Coating	13.6	0.25%	0.0%	0.3%	0.0%	99.98%	0.00300	1000.000	0.00	0.00	0.00	0.00	0.00	0.00*	0.03	100%
Powder Coating	13.4	0.25%	0.0%	0.3%	0.0%	99.98%	0.00300	1000.000	0.00	0.00	0.00	0.00	0.00	0.00*	0.03	100%
	0.0	0.00%	0.0%	0.0%	0.0%	0.00%	0.00000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	ERR	0%

*Particulate potential is a function of transfer efficiency. Although the TPY of particulate indicated is 0.0 particulate emissions are expected. Dry filters for overspray shall be required for particulate control.

State Potential Emissions Add worst case coating to all solvents 0.00 0.00 0.00 0.00

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

Appendix A: Emissions Calculations**Natural Gas Combustion Only****MM BTU/HR <100****Small Industrial Boiler****Company Name: flexcel - Jasper 15th Street****Address City IN Zip: 1037 East 15th Street, Jasper, IN 47549****CP: 037-17103****Plt ID: 037-00100****Reviewer: James Farrell****Date: 02/12/03**Heat Input Capacity
MMBtu/hrPotential Throughput
MMCF/yr

2.0

17.5

Pollutant						
Emission Factor in lb/MMCF	PM* 1.9	PM10* 7.6	SO2 0.6	NOx 100.0 **see below	VOC 5.5	CO 84.0
Potential Emission in tons/yr	0.017	0.067	0.005	0.876	0.048	0.736

*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

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updated 4/99

Appendix A: Emissions Calculations**Natural Gas Combustion Only****MM BTU/HR <100****Small Industrial Boiler****HAPs Emissions****Company Name: flexcel - Jasper 15th Street****Address City IN Zip: 1037 East 15th Street, Jasper, IN 47549****CP: 037-17103****Plt ID: 037-00100****Reviewer: James Farrell****Date: 02/12/03****HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	1.840E-05	1.051E-05	6.570E-04	1.577E-02	2.978E-05

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	4.380E-06	9.636E-06	1.226E-05	3.329E-06	1.840E-05

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.